# BARNES & THORNBURG LLP

http://www.btlaw.com

Kari A. Evans

Suite 4400 One North Wacker Drive Chicago, IL 60606-2809 Switchboard: (312) 357-1313 Fax: (312) 759-5646 Direct Dial: (312) 312-214-8812

E-mail: kevans@btlaw.com

May 30, 2005

Ms. Megan Wallace, Rules Section Office of Water Quality Indiana Department of Environmental Management 100 North Senate Avenue Indianapolis, Indiana 46204-2251

RE: <u>Indiana Water Quality Coalition and Indiana Manufacturers Association</u>
<u>Comments on #03-44(WPCB), Antidegradation Standards and</u>
Implementation Procedures

Dear Ms. Wallace:

On April 1, 2005, the Indiana Department of Environmental Management ("IDEM") published a second notice of comment period on draft rule language concerning antidegradation standards and implementation procedures. The notice provided a 60-day comment period on the draft rule language.

The Indiana Water Quality Coalition and the Indiana Manufacturers Association appreciate the opportunity to provide the following comments on the draft rule language concerning antidegradation standards and implementation procedures. The Indiana Water Quality Coalition ("IWQC") is a group of businesses with shared interests in Indiana regulations, policies and operating procedures concerning water quality. The members of the IWQC include: Indiana Coal Council, Indiana Builders Association, Indiana Manufacturers Association, Hoosier Energy, NiSource Inc., BP, American Electric Power, Eli Lilly and Company, and G.E. Plastics. The Indiana Manufacturers Association ("IMA") is a voluntary, non-profit trade association representing nearly 2,000 companies and 600,000 manufacturing jobs. IMA staff provide support to and management of the IWQC, including periodic spokesperson duties. Each of these entities has members or facilities in Indiana that may be affected by adoption of rules concerning antidegradation standards and implementation procedures.

This comment letter is organized as follows. It opens with general concerns regarding the treatment of exceptional use waters, the potential fiscal impact, and IDEM's response to the comments submitted during the first notice of comment period. Then, it addresses specific concerns with the draft rule language, arranged by rule section. For each of our specific

comments, we have proposed rule language revisions or additions. All of our suggested changes are incorporated into the enclosed redline markup of the draft rule.

## **General Comments**

#### **Treatment of Exceptional Use Waters**

Currently, there are 11 waters designated as exceptional use waters in 327 IAC 2-1-11(b). The treatment of these waters in the draft rule is wholly inconsistent with the provisions concerning exceptional use waters in Senate Enrolled Act 431, P.L. 140-2000 ("SEA 431"). SEA 431 enacted several requirements concerning the antidegradation policies and implementation procedures and designation criteria and processes for outstanding national resource waters ("ONRWs"), outstanding state resource waters ("OSRWs"), and exceptional use waters. A careful reading of SEA 431 makes it clear that the Indiana General Assembly meant for the exceptional use waters designation to be phased out. Section 27 required the Board to consider whether waters in the exceptional use category should be redesignated as OSRWs. In fact, this process should have occurred by July 1, 2004. Furthermore, while there are detailed provisions concerning future designations of waterbodies as OSRWs or ONRWs, there are no corresponding provisions concerning exceptional use waters. Thus, SEA 431 expresses a clear intent for the existing list of exceptional use waters to be promptly evaluated. Those waters that meet the OSRW designation criteria may be redesignated as such; otherwise, the waters will be subject to the Tier 1 and Tier 2 antidegradation standards and implementation procedures. Furthermore, there will be no new designations of waters as exceptional use waters.

Despite the clear intention of SEA 431 concerning the treatment of exceptional use waters, the draft rule simply states that exceptional use waters are subject to the same antidegradation standards and implementation procedures for OSRWs. It does not provide any clear procedures for reevaluating these waters and phasing out the exception use category. To comply with SEA 431, the draft rule should contain a new section to establish the mechanism for phasing out the exceptional use category, as follows:

327 IAC 2-1.3-11 Transitional procedures concerning exceptional use waters

(a) The department shall evaluate the waters currently identified as exceptional use waters in 327 IAC 2-1-11(b) in accordance with the process set forth in section 8 to determine whether they should be designated as outstanding state resource waters. The department shall present information concerning this evaluation to the water pollution control board.

<sup>1</sup> This rulemaking process was meant to be completed by October 1, 2002. However, that did not occur, and therefore, Section 27, which was non-code provision, expired without being executed. As a result, the General Assembly passed a bill in 2003 to reauthorize these sections until July 1, 2006, to ensure that IDEM and the Board are still required to undertake the required actions. *See* House Enrolled Act 1221, P.L. 231-2003, Section 5.

- (b) The water pollution control board shall take action to designate by rule any exceptional use waters that meet the criteria for outstanding state resource waters. This action shall be completed no later than July 1, 2006.
- (c) Prior to July 1, 2006, the antidegradation standards and implementation procedures set forth in this rule for outstanding state resource waters shall also apply to exceptional use waters.
- (d) The exceptional use waters designation shall cease to exist on July 1, 2006. Any exceptional use waters that have not be designated as outstanding state resource waters by July 1, 2006 shall no longer be subject to a special designation, and shall be subject to the Tier 1 and Tier 2 antidegradation standards and implementation procedures set forth in this rule.

All other references to exceptional use waters – including those in 327 IAC 2-1-6(i) and the draft new rule 327 IAC 2-1.3 – should be deleted.

# **Potential Fiscal Impact**

Discussion of potential fiscal impact in the second notice is confusing and potentially misleading. The section of the second notice titled "Potential Fiscal Impact" states the following:

IDEM anticipates that there is an effective cap of \$500,000 per project under the draft rule. If a discharger subject to 327 IAC 2-1.3-7(h) finds that the implementation of a water quality project will result in costs to the discharger in excess of \$500,000, it seems likely the discharger will instead merely take advantage of the option to pay a fee.

This analysis is wholly inadequate, because it only takes into consideration the potential costs associated with the water quality improvement requirements for OSRWs. We understand that for the second notice, IDEM is only required by statute (IC 13-14-9-4(6)(C)(i)) to provide the estimated fiscal impact of any draft rule provision that imposes a restriction or requirement that is not imposed under federal law. However, the second notice section on potential fiscal impact does not state that it only addresses the costs associated with OSRW water quality requirements, because those are the only provisions that impose requirements not imposed under federal law. Therefore, it is misleading.

As this draft rule moves forward in the rulemaking process, IDEM will be required to comply with statutory requirements requiring a complete fiscal analysis. IC 4-22-2-28 and IC 13-14-9-4.2 provide that IDEM shall also submit a draft rule with an estimated economic impact greater than \$500,000 on the regulated entities to Legislative Services Agency ("LSA"), so that LSA is able to complete a fiscal analysis in advance of preliminary adoption of the rule. IDEM is required to provide LSA with the information necessary to prepare the fiscal analysis, which

must contain an estimate of the economic impact of the proposed rule and a determination concerning the extent to which the proposed rule creates an unfunded mandate on a state agency or political subdivision. Although the total estimated economic impact is not yet known, it is clear that the draft rule has the potential to cost regulated entities in excess of \$500,000. The cap on a single water quality improvement project is \$500,000, and that doesn't take into consideration the costs associated with preparation of antidegradation demonstrations. The technical and socio-economic requirements laid out in the draft rule will require significant resources. Furthermore, there will be costs associated with demonstrating that a discharger will not cause a significant lowering of water quality, because it falls under the de minimis threshold or one of the activities specified in the rule. For example, one discharger in the state had to spend in excess of \$25,000 just to justify to IDEM that it would not cause a significant lowering of water quality.

Finally, we are concerned about IDEM's contradictory statements concerning the antidegradation requirements for OSRWs. In the "Fees" section of the response to comments, IDEM states the following:

As outlined by IC 13-18-3-2(b), the funding of a properly conducted water quality improvement project in conjunction with a new or increased discharge to an OSRW or EUW will result in the discharge's being deemed not a significant lowering of water quality. A discharge that does not result in a significant lowering of water quality for a given pollutant or pollutant parameter does not require an antidegradation determination.

This is an incorrect characterization of the statute, and also conflicts with the draft rule itself. Dischargers to OSRWs cannot simply undertake or fund a water quality improvement project to avoid all other antidegradation requirements. Rather, dischargers to OSRWs must comply with the procedures for high quality waters — which means preparation of an antidegradation demonstration for significant lowerings — and meet the water quality improvement requirements. These requirements appear to be accurately presented in the draft rule, particularly as presented in 327 IAC 2-1.3-7(h). Therefore, IDEM's response to comments is inaccurate, and misleading, because it states that it is much easier to comply with the requirements for OSRWs than the statute and draft rule actually provide.

#### **Response to Comments**

We are also concerned with the sufficiency of the response to comments from the first notice provided in the second notice. Several entities, including the IWQC and IMA, submitted detailed comments on the first notice. However, rather than carefully considering those comments and providing responsive and thoughtful answers, IDEM simply grouped the comments into general categories, and provided a generic response for each general category. For example, in the category IDEM titled "Exceptions & Exemptions," the IWQC and IMA submitted several specific comments about activities that should be identified in the draft rule as

not causing a significant lowering of water quality. To almost all of these specific comments, IDEM provided the following generic response:

The draft rule contains a limited list of activities that do not constitute a significant lowering of water quality at 327 IAC 2-1.3-6.

While this response may be appropriate to a general comment that the rule should provide such a list of activities, it is inadequate as it concerns comments on the specific types of activities that should be included in the rule.

As a result, IDEM has provided insufficient information to explain how it determined whether to include certain specific activities. For example, the IWQC and IMA submitted the following specific comment:

IDEM should modify the exemption for cleanup actions so that it will not prevent or discourage environmentally beneficial activities. The current exemptions in 327 IAC 5-2-11.3 and 327 IAC 5-2-11.7 require that the action be undertaken to alleviate an environmental release that "may pose an imminent and substantial endangerment to public health or welfare." That "endangerment" test comes from Federal statutes, and has historically been interpreted broadly, so that it is not very difficult to trigger. However, that is not the way that IDEM has interpreted the test in applying its interim antidegradation rules.

IDEM provided the generic response quoted above, which provides no useful information concerning IDEM's thoughts on the comment – such as whether IDEM agrees or disagrees with the specific comment, whether IDEM has decided to consider modification of the provision, or on what basis IDEM may have used to reject the comment.

The IWQC and IMA, and presumably all of the entities that submitted comments on the first notice, took time and great care in constructing comments, with the expectation that IDEM would exercise due care in considering and responding to those comments. Due to IDEM's insufficient response to comments, the IWQC and IMA have no option but to simply repeat many comments provided during the first notice. We sincerely hope that IDEM will take our comments more seriously during this stage of the rulemaking.

# <u>Specific Comments on New Rule 327 IAC 2-1.3, Antidegradation Standards and</u> <u>Implementation Procedures</u>

## 327 IAC 2-1.3-1, Applicability of water quality standards

This provision should be revised as follows:

Notwithstanding the requirements of 327 IAC 2-1.5-1, the water quality standards The antidegradation standards and implementation procedures established by this rule apply to all surface waters of the state.

It is not clear why it would be necessary to state that the antidegradation standards and implementation procedures established in draft new rule 327 IAC 2-1.3 apply notwithstanding the applicability section of the Great Lakes system water quality standards. 327 IAC 2-1.5-1 simply states that the "water quality standards established by this rule shall apply to all waters of the state within the Great Lakes system." There is nothing in this provision that would limit applicability of a new rule concerning antidegradation to waters within the Great Lakes system. Furthermore, if such a "notwithstanding" clause were necessary concerning 327 IAC 2-1.5-1, it is not clear why it would also not be necessary for 327 IAC 2-1-1, which contains a similar applicability provision concerning water quality standards for waters outside of the Great Lakes system.

## **327 IAC 2-1.3-2, Definitions**

# **Applicability of Definitions**

This section states that the definitions apply throughout draft new rule 327 IAC 2-1.3, and to 327 IAC 2-1 (water quality standards for waters outside the Great Lakes system) and 327 IAC 2-1.5 (water quality standards for Great Lakes system waters). However, both 327 IAC 2-1 and 327 IAC 2-1.5 contain a set of definitions, and many of the definitions in this section are duplicative of those definitions. Therefore, the definitions in this section should apply only to draft new rule 327 IAC 2-1.3.

#### (7) "CERCLA"

This definition identifies the federal statute by providing a code citation (42 U.C.S. 9601 to 9675) and amendment date (October 11, 1996). CERCLA has been amended since October 11, 1996, most recently on January 11, 2002. Therefore, the amendment date should be updated from October 11, 1996, to January 11, 2002.

## (8) "Clean Water Act" or "CWA"

This definition identifies the federal statute by providing a code citation (33 U.C.S. 1251 *et seq.*) and amendment date (October 11, 1996). The CWA has been amended since October 11, 1996, most recently on November 27, 2002. Therefore, the amendment date should be updated from October 11, 1996, to November 27, 2002.

## (11) "Community"

This definition provides that "community" means "a general collective term to describe the varieties of aquatic species and associated organisms living together in a waterbody." That definition applies to the use of the term in several provisions of the rule, including 327 IAC 2-

1.3-7(f)(1)(B)(iv), 327 IAC 2-1.3-8(d)(2)(A) and (B), and 327 IAC 2-1.3-8(d)(5). However, the definition does not apply to how the term is used in two other provisions:

327 IAC 2-1.3-7(c)(1)(A): Industrial, commercial, or residential growth in the *community*.

327 IAC 2-1.3-7(c)(1)(E): Other social and economic benefits to the *community*.

Emphasis added. In these two provisions, "community" refers to the human population in the area in which the proposed activity will take place. To avoid confusion, these two provisions should be revised so that a term other than "community" is used. An appropriate substitute terms would be "area in which the receiving waters are located."

## (12) Control document"

This definition identifies NPDES permits and Section 401 water quality certifications. However, the balance of the draft rule does not address how the antidegradation standards and implementation procedures would apply to water quality certifications. For example, the de minimis provisions in draft rule section 327 IAC 2-1.3-5 and the demonstration requirements in draft rule section 327 IAC 2-1.3-7 only apply to the NPDES permit context. Therefore, the definition should be deleted, and in the balance of the rule, the term "control document" could be replaced with NPDES permit.

NPDES permits and 401 water quality certifications are very different types of approval documents. It is simply not possible to try to cover water quality certifications with procedures meant for NPDES permits. If IDEM wishes to adopt procedures specific to water quality certifications, it should do so in a separate rulemaking that specifically addresses how antidegradation should be implemented for water quality certifications.

## (14) "Degradation"

This definition restates the statutory definition in IC 13-11-2-50.5. However, the definition is problematic as it concerning the draft rule for two reasons. First, it references rule provisions in 327 IAC 2-1 and 2-1.5, which will be repealed as a result of this rulemaking. Second, it only defines degradation for ONRWs and OSRWs, although the term is also applicable to high quality waters. Furthermore, it is not clear why it is necessary to define this term as it concerns this rulemaking, because the balance of the rule sets forth the antidegradation standards and implementation procedures that apply to all waters. Therefore, this term should be removed from the definitions.

#### (33) "Open waters of Lake Michigan"

This definition should be updated as it concerns the Indiana Harbor Ship Canal. The definition currently identifies the boundaries based upon a breakwater light and the northernmost point of a parcel of property formerly owned by LTV Steel, which is no longer in business. It

would be more appropriate to identify the boundaries by reference to specific references to latitude and longitude points as determined by GPS.

## (45) "RCRA"

This definition identifies the federal statute by providing a code citation (42 U.C.S. 6901 to 6992k) and amendment date (October 19, 1996). RCRA was not amended on October 19, 1996; it was last amended on March 23, 1996. Therefore, the amendment date should be updated from October 19, 1996 to March 23, 1996.

## (52) "Threatened or endangered species"

This definition includes species listing pursuant to the federal Endangered Species Act, as well as the following Indiana listings:

Species listed as state threatened or endangered by the Indiana department of natural resources under IC 14-22-34.

Species designated as state threatened or endangered species in the January 22, 1997, database for endangered, threatened, rare, and special concern species maintained by the Indiana natural heritage data center, division of nature preserves, department of natural resources.

The antidegradation rule should not contain any special provisions concerning federal or state threatened or endangered species. Such treatment is unnecessary and inappropriate, because protection of threatened and endangered species is already taken into consideration in the adoption of water quality criteria and in permitting actions. Therefore, the definition of threatened and endangered species should be deleted.

We also want to stress that only the federal act listings have been properly adopted after public notice and comment. Species that are listed only on an informal or internal agency list, such as the database maintained by the Indiana Natural Heritage Data Center, have not been subjected to the full panoply of public participation procedures, which is necessary before they can be the basis for enforceable permit requirements.

## (53) "Tier I criteria"

This definition references the procedures in 327 IAC 2-1-8.2 for waters outside of the Great Lakes system. However, Method 3 in that rule provision is actually a Tier II value equivalent method. Therefore, the definition should be revised to clarify that it only applies to Methods 1 and 2 in 327 IAC 2-1-8.2.

## (54) "Tier II values"

As explained in detail later in these comments, antidegradation requirements should not by applied to Tier II values. Therefore, this definition should be deleted.

#### (60) "Waters"

This definition is inconsistent with the current statutory definition of waters. Effective March 16, 2004, IC 13-11-2-265 reads as follows:

- (a) "Waters", for purposes of water pollution control laws and environmental management laws, means:
- (1) the accumulations of water, surface and underground, natural and artificial, public and private; or
- (2) a part of the accumulations of water; that are wholly or partially within, flow through, or border upon Indiana.
- (b) The term "waters" does not include:
- (1) an exempt isolated wetland;
- (2) a private pond; or
- (3) an off-stream pond, reservoir, wetland, or other facility built for reduction or control of pollution or cooling of water before discharge.
- (c) The term includes all waters of the United States, as defined in Section 502(7) of the federal Clean Water Act (33 U.S.C. 1362(7)), that are located in Indiana.

To be consistent with the statutory definition, and to avoid the possibility of future inconsistencies should the statutory definition be amended, the draft rule definition should simply reference the statutory citation, as follows:

# "Waters" has the meaning set forth in IC 13-11-2-265.

#### (63) "Whole effluent toxicity"

This definition provides that "whole effluent toxicity" means "the aggregate toxic effect of an effluent measured directly by a toxicity test." This definition should be clearly linked to toxicity test methods in the 40 CFR 136 methodologies, so that the definition is not so broad as to include toxicity tests that are more specific to the testing of pure chemicals in support of assessing generational impacts. Only the 40 CFR 136 methodologies generate data that are interpretable in the context of a wastewater discharge and receiving water ecosystem. The definition should be revised as follows:

"Whole effluent toxicity" means the aggregate toxic effect of an effluent measured directly by a toxicity test <u>performed in accordance with approved methodologies in 40 CFR Part 136</u>.

# 327 IAC 2-1.3-3, Maintenance of surface water quality standards (antidegradation standards)

The draft rule's statement of the antidegradation standard for OSRWs is inconsistent with SEA 431.

The draft rule sets forth an antidegradation standard for OSRWs which distinguishes between BCCs and non-BCCs. For BCCs, the draft rule provides that no new or increased loading is allowed unless section 6(c), which contains a limited list of activities that are not considered to cause a significant lowering of water quality, applies. This is inconsistent with the applicable provisions of SEA 431 in several ways. First, SEA 431 does not distinguish between BCCs and non-BCCs in setting forth the antidegradation standard. Second, SEA 431 provides that OSRWs are to be subject to the same antidegradation standards as high quality waters, plus an additional requirement concerning water quality improvement. Specifically, IC 13-18-3-2 provides in relevant part:

- (l) For a water body designated as an outstanding state resource water, the board shall provide by rule procedures that will:
- (1) prevent degradation; and
- (2) allow for increases and additions in pollutant loadings from an existing or new discharge if:
- (A) there will be an overall improvement in water quality for the outstanding state resource water as described in this section; and
- (B) the applicable requirements of 327 IAC 2-1-2(1) and 327 IAC 2-1-2(2) and 327 IAC 2-1.5-4(a) and 327 2-1.5-4(b) are met.
- (m) The procedures provided by rule under subsection (l) must include the following:
- (1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:
- (A) for which a new or increased permit limit is required; and
- (B) below which antidegradation implementation procedures do not apply.
- (2) Provisions allowing the permittee to choose application of one
- (1) of the following for each activity undertaken by the permittee that will result in a significant lowering of water quality in the outstanding state resource water or exceptional use water:
- (A) Implementation of a water quality project in the watershed of the outstanding state resource water or the exceptional use water that will result in an overall improvement of the water quality of the outstanding state resource water or the exceptional use water.

- (B) Payment of a fee, not to exceed five hundred thousand dollars (\$500,000) based on the type and quantity of increased pollutant loadings, to the department for deposit in the outstanding state resource water improvement fund established under section 14 of this chapter.
- (3) Criteria for the submission and timely approval of projects described in subdivision (2)(A).
- (4) A process for public input in the approval process.
- (5) Use of water quality data that is less than seven (7) years old and specific to the outstanding state resource water.
- (6) Criteria for using the watershed improvement fees to fund projects in the watershed that result in improvement in water quality in the outstanding state resource water or exceptional use water.

According to this statutory provision, the antidegradation standards and implementation procedures for OSRWs – regardless of whether the pollutant in question is a BCC and a non-BCC – must allow dischargers the ability to submit antidegradation demonstrations for significant lowerings of water quality, as long as the discharger also meets the water quality improvement requirements. Therefore, the antidegradation standard for OSRWs should be the same as the high quality water standard, with the added water quality improvement condition, as follows:

- (c) The antidegradation standard for OSRWs is as follows:
- (1) Waters designated as OSRWs shall be maintained and protected unless the commissioner finds, after full satisfaction of intergovernmental coordination and public participation of Indiana's continuing planning process and the provisions in section 7 of this rule, that allowing a significant lowering of water quality is necessary to accommodate important economic or social development in the area in which the surface waters are located. In allowing a significant lowering of water quality, the commissioner shall assure the following:
- (A) Water quality adequate to fully protect designated uses.
- (B) That there be achieved:
- (i) the highest statutory and regulatory requirements for all new and existing point sources; and
- (ii) where authority exists, all cost-effective and reasonable best management practices for nonpoint source control.

- (2) The commissioner shall use the antidegradation implementation procedures in sections 4 and 5 of this rule to determine if a significant lowering of water quality shall be allowed unless section 6 of this rule applies.
- (3) Additionally, any new or increased discharge limit shall only be allowed if the discharger demonstrates that the proposed discharge or other activities will result in a net improvement to the water quality of the receiving waterbody, as provided in section 7(h) of this rule, unless section 6 of this rule applies.

The draft rule imposes an arbitrary two-mile rule for dealing with tributaries of OSRWs. Instead, the rule should retain the impact-based test in the GLI antidegradation rule.

The draft rule proposes to extend the antidegradation standard for OSRWs to all tributaries within two miles of the OSRW. This approach represents a departure from the current impact-based test for tributaries to OSRWs in the Great Lakes system. This current approach is reasonable, and should not be changed.

In 327 IAC 5-2-11.7, the impacts of a new or increased discharge to the tributary of an OSRW are evaluated in two ways. First, the agency looks at the impact on the tributary itself under the Tier 2 requirements, to determine whether the increase consumes a high enough percentage of the tributary's assimilative capacity to be subject to antidegradation review for high quality waters. Second, the agency looks at the downstream impact of the discharge on the OSRW, to decide if the increase results in a significant lowering of water quality in the OSRW. If the increase exceeds the trigger level under either test, then review is required. Under this approach, what matters is impact on water quality, as measured by the percentage of assimilative capacity consumed in either the tributary or the OSRW. That is the appropriate focus.

In the draft rule, however, IDEM has changed that focus. Instead of looking at the actual impacts of the discharge on the OSRW, there is a "bright line" test: if the discharger is located within two miles upstream of the OSRW, then it is subject to the strict requirements that apply for dischargers located directly on the designated water. On the other hand, if the discharger is located more than two miles upstream, then it is not subject to the OSRW requirements at all, but to the Tier 2 provisions for high quality waters instead.

This two-mile rule is completely arbitrary, and has nothing to do with determining whether a particular discharge would have an impact on a waterbody. In some areas, a discharge could be much closer than two miles upstream and have no impact, while in other areas, a discharge much farther than two miles could have a major impact. The test in the current Great Lakes system rules, by focusing on impacts, treats both of these situations fairly.

In the past, IDEM justified use of the arbitrary two mile rule by stating that in a separate part of its rules, governing sinkholes and inland lakes, discharges within two miles of the waterbody are subject to the same effluent limitations that apply to facilities that discharge directly to the waterbody. However, this two-mile rule is completely disconnected from any

technical analysis of impacts on water quality, and treats some dischargers unfairly. Moreover, the possible burdens imposed by subjecting a discharger to the OSRW rules are far greater than the burdens of complying with the sinkhole/inland lake limitations, so it is even more important in this case to make sure that the requirements have a solid technical basis. The impact-based test in 327 IAC 5-2-11.7 has such a basis, and should replace arbitrary two mile provision in the draft rule.

The provision in draft rule 327 IAC 2-1.3-3(e) concerning alternative thermal effluent limitations pursuant to Clean Water Act Section 316(a) should applied to all waters, including OSRWs and ONRWs.

The draft rule states that a determination concerning alternative thermal effluent limitations pursuant to Clean Water Act Section 316 shall be considered to be consistent with the antidegradation standards. However, the provision states that it specifically does not apply to OSRWs or ONRWs. There is no reason for limiting this provision to waters other than OSRWs and ONRWs. This provision is based upon the federal antidegradation regulation in 40 CFR 131.12(a)(4), which is not limited in application to waters that are not specially designated waters.

Furthermore, it is not clear how IDEM would implement antidegradation in cases where it decides to provide alternative effluent limitations. Section 316(a) of the Clean Water Act allows permitting authorities to issue alternative thermal effluent limitations upon a demonstration that such limitations will "assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water." This process results in thermal limits that are based on an evaluation of the aquatic life designated use, rather than limits based upon the numeric criteria for temperature. Therefore, the antidegradation implementation procedures set forth in the draft rule would not be applicable to alternative effluent limitations. The draft rule provision should be revised so that it applies to all waters.

# 327 IAC 2-1.3-4, Antidegradation implementation procedures for bioaccumulative chemicals of concern

The antidegradation implementation procedures for BCCs for OSRWs is inconsistent with SEA 431.

As stated previously in these comments, SEA 431 provides that OSRWs are to be subject to the same antidegradation standards as high quality waters, plus an additional requirement concerning water quality improvement. Therefore, the antidegradation implementation procedures for BCCs for OSRWs should be the same as the high quality water procedures, with the added water quality improvement condition, as follows:

In OSRWs, for a BCC, unless section 6(c) of this rule applies, a significant lowering of water quality will occur and an antidegradation demonstration will be required when a new or increased loading of any BCC is proposed from any new or

existing discharger, either point source or nonpoint source, for which a new, renewed, or modified NPDES permit would be required as a result of any activity, including the following:

- (1) Construction of a new regulated facility or modification of an existing regulated facility such that a new or modified permit is required.
- (2) Modification of an existing regulated facility operating under a current permit such that the production capacity of the facility is increased.
- (3) Addition of a new source of untreated or pretreated effluent containing or expected to contain any BCC to an existing wastewater treatment works, whether public or private.
- (4) A request for an increased limit for a BCC in an applicable permit.
- (5) Other deliberate activities that, based on the information available, could reasonably be expected to result in an increased loading of any BCC.

Additionally, unless section 6 of this rule applies, the applicant must demonstrate that the proposed discharge or other activities will result in a net improvement to the water quality of the receiving waterbody, as provided in section 7(h) of this rule.

# 327 IAC 2-1.3-5, Definitions and coverage for pollutants that are not bioaccumulative

## De minimis/cumulative caps provisions

High Quality Waters

The draft rule proposes de minimis/cumulative cap provisions for high quality waters that are significantly different from the current provisions in the implementation procedures for the Great Lakes system, 327 IAC 5-2-11.3 ("current rule"). The current rule defines the de minimis/cumulative cap based on unused loading capacity and total loading capacity. Specifically, if as a result of a deliberate activity, a discharger requests a new permit limit or modified permit limit, and the increased limit (as mass) is less than 10 percent of the unused loading capacity and at least 10% of the total loading capacity (TLC) remains unused after the increase, then the increase is considered a de minimis lowering of water quality. Hence, the activity and modified or new permit limit is not subject to antidegradation demonstration requirements.

The current rule establishes a clear threshold based on capacity that, cumulatively, could ever be allocated to effluent mass increases as 10 percent of TLC has to remain unused. That is,

as multiple requests or multiple dischargers request small increases to discharge limits, the cumulative cap is:

As the TLC is based on a water quality criterion and the applicable stream design flow, the mass to remain unused is constant unless effluent load or background load changes dramatically. Table 1 presents a mathematical presentation of the current rule provisions concerning de minimis/cumulative cap.

The draft rule defines the de minimis/cumulative cap based on only unused loading capacity, as presented in Table 2. As in the current rule, the de minimis increase to a limit (or new limit) has to be less than or equal to<sup>2</sup> 10 percent unused loading capacity. However, the cumulative cap is different; unlike the current rule, which provides that at least 10 percent of the total loading capacity must remain unused; the draft rule states that least 85 percent of the unused loading capacity must remain unused. The first concern with this new definition of de minimis is that mathematically exactly 90 percent will remain unused if a 10 percent de minimis increase occurs, therefore the 85 percent unused cumulative loading capacity is misleading. The second concern is that a provision requiring a percent of unused loading capacity to remain unused provides no relation to the fixed total loading capacity, and could (barring compliance with a water quality criterion) result in the cumulative cap of:

## TLC – Background Load = Cumulative Effluent Cap

Notwithstanding how the draft rule language actually defines the cumulative cap, it is our understanding that IDEM intended to substantially reduce the cumulative cap for high quality waters. In a memorandum dated December 15, 2004, IDEM made the following statements concerning the proposed revisions:

The remaining unused loading capacity for waters that are not OSRWs or ONRWs has been changed to eighty-five percent (85%). These changes were made based on the West Virginia Court ruling. In this ruling, the court determined that sufficient evidence had not been provided detailing why a cumulative lowering of water quality equal to twenty percent (20%) of the available assimilative capacity (i.e. a twenty percent cap) would be appropriate. The court went on to say that, "From the perspective of maintaining the water quality of a Tier 2 water body, the de minimis standard for cumulative discharges is more important than the de minimis standard for individual discharges; it is the former that will dictate the total reduction in available assimilative capacity that a water body may undergo without any Tier 2 review." The court did allow a cumulative discharge cap of ten

<sup>&</sup>lt;sup>2</sup> The current rule does not contain "equal to", though in IDEM worksheets, it appears to have been thought to be "equal to".

percent (10%). IDEM is suggesting that it would be prudent to limit the cap to ten (10) to fifteen (15) percent of the unused loading capacity.

Table 3 provides an example of how this de minimis/cumulative cap provision would work. It is clear from this example that the cumulative cap is extremely stringent.

The court case that IDEM refers to is *Ohio Valley Environmental Coalition v. Horinko*. 279 F. Supp. 2d 732 (S.D. W. Va., Huntington Division 2003). That case concerned U.S. EPA's approval of West Virginia's antidegradation rules. As it concerns de minimis/cumulative cap, the court determined that the administrative record supported U.S. EPA's approval of West Virginia's de minimis provision; however, the administrative record did not support U.S. EPA's approval of West Virginia's cumulative cap.

As an initial matter, it should be noted that the decision is only binding upon U.S. EPA as it concerns its review and approval of West Virginia's antidegradation rules. Furthermore, the court did not prohibit U.S. EPA from approving state rules that allow a de minimis lowering without an antidegradation demonstration. Rather, the court simply determined that U.S. EPA did not adequately justify its decision to approve West Virginia's approach concerning the cumulative cap. The additional observations the court made concerning the size of the cumulative cap were just dicta – remarks that were not relevant to the actual basis of the court's decision. Thus, it is not appropriate to take those remarks out of context, especially to the extent of using them as justification for making a significant change to the de minimis/cumulative cap provisions that currently apply to high quality waters.

Notwithstanding the gratuitous comments concerning the cumulative cap in the West Virginia opinion, IDEM has not presented data or information to show that the current de minimis/cumulative cap provisions are not satisfactory for managing antidegradation standard requirements with respect to minor increases to permit limits. In fact, the application of the cumulative cap and definition of that cap as defined in the current rule is appropriate and justifiable.

## General Support for De Minimis/Cumulative Cap Provisions

NPDES permits are not issued unless the proposed discharge is treated with appropriate technology and complies with water quality standards. The antidegradation implementation rule goes beyond assuring that the discharges are safe – by requiring review of changes in water quality that may result from increased or new discharges, even though those changes would not cause any violation of water quality standards. This antidegradation review imposes significant additional cost on the regulated community and ultimately on their customers. These costs are principally the additional time and expense involved in complying with the antidegradation requirements. Where the effect of a new or increased discharge on the environment is insignificant, there is no benefit to requiring this commitment of time and money by the public, regulated community and government agencies. Requiring everyone to review inconsequential

additional discharges that will remain below the water quality standards is an arid formalism that is punitive to industry without offering meaningful protection to human health or environment.

The federal antidegradation policy was born as an agency statement of general policy. U.S. EPA and its predecessor agencies have consistently interpreted the policy to provide flexibility to States concerning implementation of the policy. That interpretation is reasonable, and entitled to deference. U.S. EPA's interpretation that States should be given latitude in determining antidegradation implementation procedures is clearly supported by the principles of the Clean Water Act. The central principle, embodied in Section 303 and the Clean Water Act as a whole, is that States are given the primary authority to establish and implement water quality standards. That principle of State primacy has special force in the antidegradation context. High quality waters that are subject to antidegradation requirements have water quality that is, by definition, better than applicable standards. Therefore, the issue is not protection of aquatic life or human health; those goals are already secured. Instead, the relevant question is the extent of additional restrictions that will be imposed in the interest of further protecting an important resource. That is fundamentally an issue of social policy, with significant local land use implications, which should be left to the States.

U.S. EPA has traditionally interpreted its antidegradation policy as requiring review only if there will be a significant lowering of water quality. Further, U.S. EPA has consistently allowed States the discretion to define what will constitute "significant" lowering or degradation in their own States. In fact, non-BCCs in Great Lakes States, U.S. EPA has clearly indicated its intent to allow de minimis/cumulative cap provisions that are identical to the current rule.

De minimis lowerings would not be subject to antidegradation review, and were defined as increased discharges of [non-bioaccumulative chemicals of concern] that would use less than 10 percent of the available assimilative capacity of a water body, and that would retain at least 10 percent of the total assimilative capacity.

Federal Water Quality Guidance for the Great Lakes System: Supplementary Information Document, EPA-820-B-95-001 (Mar. 1995).

Other states have also adopted rules that allow de minimis lowerings of water quality without an antidegradation demonstration. For example, Michigan has established a de minimis allowance for increased loadings of non-BCCs that use less than 10 percent of the unused loading capacity. 451 R 323.1098. Wisconsin's de minimis allowance for most parameters is one-third of the assimilative capacity. NR 207.05. It should be noted that neither of these states have established a cumulative cap.

## Specific Comments on De Minimis Allowance

It is clear that U.S. EPA authorizes state allowances for de minimis lowerings of water quality. The West Virginia decision also found support for de minimis provisions, and

specifically upheld U.S. EPA's approval of West Virginia's de minimis allowance of 10 percent of unused loading capacity. Indiana adopted this same 10 percent de minimis provision for high quality waters in the Great Lakes system. Therefore, it is reasonable to include this 10 percent de minimis provision in this new rulemaking. However, we believe that the de minimis of 10 percent of unused loading capacity should be established as the default allowance, and that the rules should also provide for the ability to establish an alternative de minimis threshold (similar to the Indiana rule providing a default mixing zone, but also allowing dischargers to seek alternate mixing zones). An alternative de minimis threshold would be appropriate under several circumstances in which it can be shown that a different value or method of determination would still result in a de minimis lowering. The following analyses and studies are examples of techniques to develop an alternative de minimis threshold in lieu of the default 10 percent de minimis value:

- 1. Correlation of the proposed increased effluent load to instream concentration response relative to water quality criteria. This involves determining how a de minimis increase would impact receiving stream water quality as measured by a relative change to the water quality criteria. The correlation would show how a small change in water quality criteria (originally designed to protect 95 percent of aquatic life) would still conservatively protect the indigenous organisms.
- 2. Incorporation of the non-conservative fate of a constituent of concern. For example, the nitrogen series decay can be integrated into a de minimis assessment for ammonia. A de minimis loading of greater than 10 percent may be kinetically reduced to less than 10% within the antidegradation segment of the receiving water.
- 3. Use of alternative receiving water design flows for effluent dominated waters. If the de minimis loading is discharged to a zero flow receiving water (i.e., 7Q10 = 0), than an alternative flow must be generated to determine the initial total loading capacity and subsequent remaining unused loading capacity. This alternative flow may be of the form of an upper level statistic (99th percentile, etc.) of the effluent flow itself or other representative flow during average receiving water flow conditions (either continuous or intermittent). Wet weather conditions and corresponding receiving water flow may also be analyzed.
- 4. Use of an alternative statistic for background concentration. Based on instream monitoring data, a background concentration statistic other than average/mean/median may be more appropriate considering the frequency of detection and the magnitude of detection relative to water quality criteria.

## Specific Comments on Cumulative Cap

We believe that the rule should continue to provide a cumulative cap of 10 percent of the total loading capacity, consistent with the current rule. The following information can be used to demonstrate that this cumulative cap is consistent with a de minimis allowance. Several

conservative assumptions are already applied to the determination of the cumulative de minimis cap of 10 percent of the total loading capacity must remain unused. These assumptions include:

- 1. Use of chronic water quality criteria to calculate the total loading capacity.
- 2. Use of low flow (i.e., 7Q10) for receiving water when calculating total loading capacity.
- 3. Use of a maximum permit limit for current effluent loading, if available.
- 4. Use of a maximum monthly average flow to calculate current effluent load, if the discharge does not have a permit limit.
- 5. Conservative nature of effluent for all constituents.

These assumptions are cumulative, that is, they are applied simultaneously. Therefore, the probability of impact due to a de minimis increase is reduced geometrically (multiplication) as the assumptions "overlap." For example, the cumulative cap of 10 percent total loading capacity remaining unused can be interpreted as allowing cumulative de minimis effluent loading increases up to 90 percent of the total loading minus the background load. Under assumption #2 above, if the ratio of the median receiving water flow to the corresponding 7Q10 flow is 7:1 (typical for variety of Indiana receiving waters as indicated from USGS gaging station data), the de minimis loading increase on an average basis approximates as 90% / 7 = 13%. Applying assumption #4 simultaneously, if the ratio of the average effluent flow to maximum monthly average flow is 2:1 (arbitrary), then the de minimis loading increase on an average basis would further reduce to 13% / 2 = 7%. Additional assumptions above would further reduce the de minimis loading based on average, typical conditions. This example illustrates the general nature (not particular calculation techniques) of cumulative conservative assumptions for the current de minimis loading cap, further supporting the retention of the cap in the proposed antidegradation rules.

# Threatened and Endangered Species

The special de minimis/cumulative cap provisions for waters containing federal or state threatened or endangered aquatic species should be delete. In the December 15, 2004 memorandum, IDEM made the following statements concerning the proposed revisions:

The remaining unused loading capacity for waters that are not OSRWs or ONRWs, but contain aquatic federally listed threatened and endangered species or any aquatic state listed endangered species, has been changed to ninety percent (90%).

However, IDEM has provided no justification for establishing more stringent requirements for threatened and endangered species. In fact, such treatment is unnecessary and inappropriate, because protection of threatened and endangered species is already taken into consideration in the adoption of water quality criteria and in permitting actions.

#### **OSRWs**

The de minimis/cumulative cap provisions for OSRWs are more stringent than the corresponding provisions for high quality waters. Such more stringent provisions do not comply with the requirements of SEA 431, which provide that OSRWs are subject to the same antidegradation requirements as high quality waters, plus an additional overall improvement requirement. IC 13-18-3-2(1) provides in relevant part:

For a water body designated as an outstanding state resource water, the board shall provide by rule procedures that will ...

- (2) allow for increases and additions in pollutant loadings from an existing or new discharge if:
- (A) there will be an overall improvement in water quality for the outstanding state resource water as described in this section; and
- (B) the applicable requirements of 327 IAC 2-1-2(1) and 327 IAC 2-1-2(2) and 327 IAC 2-1.5-4(a) and 327 2-1.5-4(b) are met.

The 327 IAC sections referenced in this provision are the antidegradation requirements for all waters (Tier 1) and high quality waters (Tier 2). Application of this provision clearly requires that the OSRW antidegradation requirements, including specification of de minimis/cumulative cap provisions, should be the same as those for high quality waters. Therefore, the draft rule should be revised so that the de minimis/cumulative cap provisions recommended in our previous comments on high quality waters also apply to OSRWs.

#### A provision concerning heat should be provided for high quality waters.

The de minimis provisions for OSRWs contain specific considerations for heat, as follows:

For heat, one (1) of the following conditions must be satisfied:

- (i) The new or increased discharge will not result in an increase in temperature:
- (AA) in a stream or an inland lake, outside of the designated mixing zone, where applicable; or
- (BB) in Lake Michigan, as allowed in 327 IAC 2-1.5-8(c)(4)(D)(iv), at the edge of a one thousand (1,000) foot arc inscribed from a fixed point adjacent to the discharge.
- (ii) The new or increased discharge will not result in an increase in waste heat:
- (AA) for a stream, that is greater than the amount determined by calculating the number of British thermal units (BTUs) required to

raise the temperature of the stream design flow of the receiving stream by one (1) degree Fahrenheit; or

(BB) for Lake Michigan, greater than five-tenths (0.5) billion BTUs per hour.

These heat provisions were incorporated into the Great Lakes system OSRW antidegradation implementation rule 327 IAC 5-2-11.7 when it was amended in 2000. The provisions were added to provide clear procedures concerning application of antidegradation to thermal discharges and temperature, parameters which are very different from chemicals. Related, though not necessarily identical, provisions should also be incorporated into the de minimis provisions for high quality waters.

The draft rule should clearly provide that antidegradation review is not required for WET and pH.

Draft rule 327 IAC 2-1.3-5(b) sets forth procedures for determining whether a new or increased discharge will result in a significant lowering of water quality. WET and pH are specifically excepted from these procedures. However, the draft rule contains no alternative provisions concerning WET and pH. WET and pH are non-conservative parameters, for which it is simply not feasible to construct procedures for antidegradation review. Therefore, the water quality criteria are the only valid reference point to use in assessing water impacts with respect to these parameters. The draft rule should clearly provide that WET and pH shall not be subject to antidegradation review.

Total residual chlorine also should not be subject to antidegradation review.

IDEM imposes effluent limitations for dischargers that use chlorine for disinfection or zebra mussel control. The concentration based WQBELs are below the level of quantification, and often below the level of detection. Therefore, it is not possible to determine mass loading for TRC in a discharge. Furthermore, TRC dissipates quickly, and the background concentration in the receiving water will always be zero. Thus, there is no loading capacity, either unused to total. As a result, it is simply not possible or necessary to construct antidegradation review procedures for TRC. The draft rule should provide that TRC shall not be subject to antidegradation review.

Antidegradation requirements should not by applied to Tier II values; alternatively, a qualitative trigger should be used for substances with Tier II values for purposes of requiring an antidegradation review.

The draft rule extends its application to parameters for which a Tier II value can be calculated. We are very concerned about this treatment of Tier II values. Under the rules that apply to dischargers in the Great Lakes system, IDEM may develop a Tier II value based on as little as one test of water fleas (*daphnids*) and application of extremely large "uncertainty factors." These values will change over time – as more data is developed, the agency will reevaluate its database, and also apply smaller uncertainty factors to take into account the greater

amount of data. Thus, different dischargers, whose permits are reviewed at different times, will likely be faced with different Tier II values for the same exact substance. In this circumstance, the antidegradation trigger level for the first discharger could be much smaller than for subsequent facilities, and the first discharger may have to go through antidegradation review while other, later dischargers will not be subject to those requirements, even though they are all discharging the same substance at the exact same level. This is an arbitrary, unfair system that has no relation to the actual environmental impact of the facilities. Therefore, we believe that the antidegradation review process should not apply to substances that have Tier II values. At a minimum, the agency should not apply numeric trigger levels. Instead, there should be a qualitative test, such as "significant impact on water quality." That would allow the agency to assess the likely effect of the substance, without the result depending totally on when the discharger has submitted its application and which uncertainty factor is currently appropriate for use in a Tier II value.

A qualitative trigger level would be especially appropriate for use in assessing whether to apply antidegradation review to major cations and anions, such as calcium, sodium, potassium, magnesium, manganese, carbonate, bicarbonate, phosphate and sulfate. Under the previously proposed rules, these substances were subject to the Tier II value process. (It should be noted that elsewhere in these comments, we point out that application of the Tier II methodology to these substances is not appropriate. For purposes of this discussion, we assume that the Tier II requirements will continue to apply.) As a result, IDEM will derive very stringent Tier II values for the cations and anions, and when a discharger submits a request to increase its discharge of one of those materials, it will be very likely to trigger antidegradation review, since the trigger levels for review will be very small. However, this process does not consider the fact that evaluating toxicity of these substances is a complex matter. There are substantial differences in toxicity among the major ions (some ions present very little toxicity), and there will be differing responses of aquatic organisms depending on the ionic composition of waters. When evaluating the toxicity of a major ion, one must consider the toxicity effects of the opposing ion as well as the ionic balance of the solution. Application of strict numeric trigger levels in antidegradation review does not allow for evaluation of any of those factors. Therefore, if the cations and anions are to be subject to antidegradation review, the trigger level should be qualitative, such as "significant impact on water quality," so the appropriate factors can be considered.

# The Antidegradation Rule Must Provide that Individual Activities Seeking Coverage Under General Permits Are Not Required to Undergo Antidegradation Review

The draft rule contains no references to general permits. In the response to comments, IDEM made the following statements concerning general permits:

General Permits are not included in this draft rule. For most general permit categories, a justification can be provided to U.S. EPA to demonstrate that existing requirements are satisfactory to address antidegradation. IDEM will keep working with U.S. EPA and the public to establish the best approach relative to general

permit categories as U.S. EPA and other states gain some experience in responding to the court decision.

The court case that IDEM refers to is *Ohio Valley Environmental Coalition v. Horinko*. 279 F. Supp. 2d 732 (S.D. W. Va., Huntington Division 2003). That case concerned U.S. EPA's approval of West Virginia's antidegradation rules. The Court determined that U.S. EPA did not provide sufficient support for its approval of West Virginia's decision to conduct antidegradation review at the time a State general permit is issued, rather than to require case-by-case review of each activity seeking coverage under a general permit. *Id.* at 762.

As an initial matter, it should be noted that the decision is only binding upon U.S. EPA as it concerns its review and approval of West Virginia's antidegradation rules. However, the general principals of law discussed in that case provide useful guidance concerning Indiana's antidegradation rulemaking. As IDEM has rightfully recognized, the court did not prohibit U.S. EPA from approving state rules that do not require individual antidegradation review for each project seeking coverage under a general permit. Rather, the court simply determined that U.S. EPA did not adequately justify its decision to approve West Virginia's approach.

In some instances there is simply insufficient evidence in the administrative record to support certain aspects of West Virginia's implementation procedures and, correspondingly, the EPA's approval of those procedures. For example ... there [is not] sufficient evidence in the record explaining how Tier 2 review, which is location-specific and requires public participation, could be done at the time a general section 402 or section 404 permit was issued, rather than at the time new individual discharges are proposed.

*Id.* at 737 (emphasis added). Furthermore, the court held that U.S. EPA could allow states to adopt rules to provide that antidegradation review would occur when a general permit is issued, rather than when dischargers submit notices of intent to comply with the general permit.

According to the EPA, the fact that "States ... must apply antidegradation requirements to ... any activity that requires a ... CWA § 402 NPDES permit[] or CWA § 404 dredge and fill permit[]," id., does not mean that antidegradation reivew cannot be done at the general permit stage. The court agrees with the EPA that this statement can reasonably be read to permit antidegradation review of a general permit rather than review of each individual use under that permit.

*Id.* at 759. Thus, the lesson to be learned from the case is that IDEM should make specific findings to support rules that do not require case-by-case antidegradation review of activities covered by general permits. Such specific findings will allow U.S. EPA to approve the rules based on an adequate administrative record.

The IWQC and IMA support IDEM's statement in the second notice that it can properly support not requiring individual antidegradation review for activities seeking coverage under most general permits. There may be a general concern that it is not possible to make an upfront determination that a general permit meets antidegradation requirements, because activities to be covered by the general permit will occur throughout the state. However, very nature of the activity for which the waiver of antidegradation review is applicable will demonstrate that there should not be an adverse water quality impact regardless of where the activity is conducted. The requirements to establish a general permit for discharges from a particular type of activity are sufficient to demonstrate that no significant degradation will occur from the cumulative effects of all such discharges. Therefore, a second antidegradation review for each individual discharge seeking coverage under a general permit is not necessary.

Existing activities will not be subject to antidegradation review because there is no proposed new or increased discharge.

As an initial matter, it should be noted that antidegradation review is only required for a proposed new or increased discharge. Therefore, existing activities that are currently covered by general permits or seek general permit coverage in the future (either by switching from an individual permit to a general permit or because previously unregulated activity is now regulated) will not be subject to antidegradation review. Therefore, when IDEM renews or reissues general permits in the future, thereby requiring submission of new notices of intent from existing dischargers, there will be no need to consider antidegradation review, because there will be no new or increased discharge.

IDEM has authority to require an individual permit for an activity if IDEM determines that a general permit is not adequate to assure compliance with water quality standards.

Furthermore, it is important to remember that IDEM currently has authority to deny general permit coverage to any existing or proposed new discharger if IDEM determines that the activity will result in a discharge that cannot be adequately controlled through the general permit requirements. Several general permits specifically exclude certain types of activities for which it has been determined that coverage by a general permit is not appropriate to control the discharge. For example, Rule 12 (sand, gravel, dimension stone, or crushed stone operations) specifies that the following facilities are not eligible for the general permit, must obtain individual NPDES permits: crushed stone operations that use organic amine, fatty acid, or pine oil flotation agents; industrial sand operations using acid, alkaline, or hydrofluoric acid flotation; industrial sand operations using the acid leaching process. 327 IAC 15-12-3(b).

Furthermore, general permits are only allowed for activities with an insignificant water quality impact. Otherwise, IDEM has the authority to require dischargers to obtain an individual permit.

(b) ... Cases where individual NPDES permits may be required include the following: (1) The applicable requirements contained in this article are not adequate to ensure compliance with: (A)

water quality standards under 327 IAC 2-1 or 327 IAC 2-1.5; or (B) the provisions that implement water quality standards contained in 327 IAC 5.

327 IAC 15-2-9(b)(1). If there is a concern that a particular activity could cause a significant lowering of water quality, it is appropriate for IDEM to require individual permits for these situations. Activities excluded from coverage by a general permit must undergo the antidegradation review process that applies to issuance of individual NPDES permits.

<u>Information to support a rule provision that activities seeking coverage under general permits</u> should not be required to undergo individual antidegradation review.

There are two general methods to provide that specific activities seeking coverage under general permits are not required to undergo individual antidegradation review. First, it can be determined that discharges authorized by a general permit do not cause a significant lowering of water quality. Under this alternative, the rule would provide that activities seeking general permit coverage are not required to make an antidegradation demonstration. Alternatively, the rule could specify that discharges authorized by general permits satisfy the antidegradation policy because they are necessary to accommodate important economic or social development in the area in which the discharge is located. Either determination will ensure that IDEM will not need to conduct individual antidegradation review for each discharger seeking coverage of a general permit.

The following information can be used to support either approach for general permits for which our members seek coverage.

# Rule 5 – Storm Water Discharges Associated with Construction Activity

- Activities do not result in significant lowering: Discharges only occur during wet weather events, when the receiving water is at high flow conditions (as opposed to critical low flow conditions). Furthermore, construction activities are limited in duration. Therefore, any potential lowering of water quality would be short term and temporary.
  - Rule 5 also imposes the necessary conditions to ensure that discharges subject to the general permit will not cause a significant lowering of water quality. To comply with the general permit, entities must prepare and implement detailed storm water pollution prevention plans, and must undertake specific erosion and sediment control measures designed to minimize water quality impacts.
- <u>Technical necessity</u>: The general permit requires development of a storm water pollution prevention plan and implementation of best management practices ("BMPs"). BMPs are the preferred method of controlling storm water discharges. U.S. EPA and Indiana both have approved the use of BMPs to achieve attainment of water quality standards. 40 CFR § 122.44(k) allows permits to be issued with:

Best management practices (BMPs) to control or abate the discharge of pollutants when: ... (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

See also, 327 IAC 5-2-10(7). In the August 1, 1996 guidance document entitled Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm water Permits, U.S. EPA provided a strong endorsement for BMPs in storm water permits:

Although NPDES permits must contain conditions to ensure that water quality standards are met, this does not require the use of numeric water quality-based effluent limitations. Under the CWA and NPDES regulations, permitting authorities may employ a variety of conditions and limitations in storm water permits, including best management practices, performance objectives, narrative conditions, monitoring triggers, action levels (*i.e.*, monitoring benchmarks, toxicity reduction evaluation action levels), etc., as the necessary water quality-based limitations, where numeric water quality-based effluent limitations are determined to be unnecessary or infeasible.

61 Fed. Reg. 57,426.

• <u>Important economic/social development</u>: Construction projects support development, whether residential, commercial or industrial. Development furthers economic and social progress in communities. Further, many local governments (either county or municipal) perform zoning activities and/or issue building permits. If a construction project has obtained local approval in the form of obtaining a zoning change or a building permit, it is presumed to be important to the area.

Rule 6 – Storm Water Discharges Associated with Industrial Activity

 Activities do not result in significant lowering: Discharges only occur during wet weather events, when the receiving water is at high flow conditions (as opposed to critical low flow conditions). Therefore, any potential lowering of water quality would be short term and temporary.

Rule 6 also imposes the necessary conditions to ensure that discharges subject to the general permit will not cause a significant lowering of water quality. To comply with the general permit, entities must prepare and implement detailed storm water pollution prevention plans designed to reduce the potential for industrial activities to be exposed to storm water. Dischargers are also required to conduct monitoring throughout the period of general permit coverage, to verify the effectiveness of the storm water pollution prevention plan and the specific best management practices undertaken at the facility.

- <u>Technical necessity</u>: The general permit requires development of a storm water pollution prevention plan and implementation of BMPs. As explained above, BMPs are the preferred method of controlling storm water discharges. The general permit imposes monitoring requirements to gauge water quality.
- <u>Important economic/social development</u>: Industrial activity supports development in the form of jobs, taxes, and influx of money to the local economy. Such development furthers economic and social progress in communities.

#### Rule 7 – Coal Mining, Processing, and Reclamation

• Activities do not result in significant lowering: Coal mining operations in Indiana are conducted in rural settings. Sediment ponds generally outflow to straightened agricultural ditches. The actual pre-mine use of these ditches is to convey storm water from the fields to facilitate farming. Runoff from coalmine operations is generally of higher quality than agricultural runoff due to the required mine use of sediment basins, erosion control and vegetative cover. Coalmine discharges are not generally continuous, but are comprised of stormwater runoff similar to that from a construction site. Most sediment ponds flow less than 10 percent of the time. Additionally, the ponds are temporary because the operation is moving and has a fixed life based on the coal reserves present.

No chemicals are used in mining or processing coal except flocculants – similar to those use in drinking water treatment systems – and occasionally, sodium hydroxide or ammonia are used for pH adjustment in a closed loop system for certain coals. Coal preparation at the mine site is basically a gravity separation process. An issue in the past for mines has been the presence of the naturally occurring mineral pyrite that sometimes exists in both the coal and some rock units. This mineral when exposed to the atmosphere and water oxidizes to soluble Fe and H+. This has been a problem at pre-SMCRA sites left un-reclaimed. Such problems are avoided at modern mine sites by the implementation of BMPs and good mining practices pursuant to SMCRA. U.S. EPA recently withdrew proposed effluent guidelines for the construction industry finding that best management practices were sufficient.

Effluent limits for mines in Indiana are more stringent than the effluent limitation guidelines established by U.S. EPA. See 40 CFR Part 434. The federal ELGs were established through exhaustive scientific and economic studies by U.S. EPA and its consultants. The parameters currently required for testing were found by U.S. EPA to be sufficient after extensive testing of a much longer list of parameters of concern. In other words, U.S. EPA established parameters are indicator parameters. That is where the indicator parameters were found to be within certain limits, other parameters (such as the RCRA metals) were also found to be within acceptable limits. For example, pH is a major factor in the solubility of metals. If the pH is kept at an acceptable level then metals are controlled. Black Beauty has nearly 200 outfalls in Indiana and currently only one outfall requires occasional treatment for pH and that particular outfall receives runoff

from an un-reclaimed pre-SMCRA site. Additionally, coalmine effluent flows are generated by storm water, thus dilution occurs in-stream from cumulative storm water runoff in the watershed.

Studies and surveys indicate that modern mines do not create environmental problems. A recent verbal survey conducted by U.S. EPA Region 5 found that Region 5 States reported no environmental problems from modern coalmines. U.S. EPA's recent draft coalmine EIS in West Virginia data indicate that mined watersheds have ecological values similar to un-mined sheds. See "A Survey of the Condition of Steams in the Primary Region of mountaintop Mining/Valley Fill Coal Mining" Signal Corporation, U.S. EPA Region 3, 2000. In 2001, the USGS published a fish community survey that found that streams associated with large scale surface mining activity had high scores in terms of both the sensitive individuals and total fish counts (USGS Water Resources Investigations Report 01-4048). A 2003 Illinois EPA macro-invertebrate study conducted on Lower Grindstone Creek downstream from form a Freeman United Coal Mine discharge in Southern Illinois found no significant difference between this site and a control site. A 2003 unpublished mussel and macro-invertebrate study conducted at an Illinois coal mine by the Illinois Natural History Survey found that mussels were unaffected by the coal mine discharge and that macro-invertebrates were actually more diverse downstream from the mine discharge. Illinois EPA staff have repeatedly stated publicly and written in anti-degradation analysis that modern coal mines are not an environmental problem. Illinois is similar environmentally to Indiana. Indiana mines have used general permits for approximately 10 years without problem or question.

Coalmines are inspected frequently. Mine facilities (including surface water drainage) are inspected by the Indiana DNR on a periodic basis. Written inspection reports are required on a monthly basis and a "complete" inspection report is required on a quarterly basis. All flowing outfalls must be sampled by the inspector. On larger mines inspectors are often present several days per week or more. Additionally, the Federal Office of Surface Mining (OSM) conducts random oversight inspections (which includes the surface water issues) to ensure that DNR is meeting applicable Federal regulations.

The current coalmine general permit requires public notice. Additionally the mine permit is public noticed and the permit application is made available in local libraries typically 7-8 months prior to approval. A considerable portion of the mining permit application is devoted to the specific surface water issues for the mine.

In conclusion, there is no scientific evidence to indicate that modern mines in Indiana significantly lower water quality. There is significant regulatory oversight and extensive opportunity for the public to comment far beyond what exists for other general permit categories.

• <u>Technical necessity</u>: Extensive U.S. EPA studies have determined that sediment basin technology (along with other good mining practice BMPs required by State and Federal Law) is the proper technology for coal mines. *See* Final Development Document for

Effluent Limitations Guidelines and Standards for the Coal Mining Point Source Category (EPA-440/1-82/057), Evaluation of Performance Capability of Surface Mine Sediment Basins (EPA-440/1-79/200). As part of the Federal Effluent Guidelines Program Plan, U.S. EPA evaluated the effluent guidelines for coal mines (40 CFR 434) in 2003, and decided that revision was not warranted at this time. Finally, the general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.

Mining is different from other industries in that the facilities and the mine must be located where the resources are present. Other factors such as proximity to transportation, power lines, and reserve configuration dictate facility locations and are critically important to the viability and success of an operation. Reserves may be owned or controlled many years before mining occurs and involve a substantial long-term investment. Uncertainty as to regulatory requirements can have a seriously negative affect on the future of the coal industry in Indiana.

• Important economic/social development: Coal mining is deemed to be of social and economic importance by Indiana statute. See, e.g., IC 14-34-1-3 (7) ("Assure that the coal supply essential to the nation's energy requirements and economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the nation's need for coal as an essential source of energy.") Indiana law also requires that operations be conducted in a manner that maximizes the use of the coal resource. See, e.g., IC 14-34-10-2 ("Duties of permittee ...(b) In addition to other standards a permittee must meet under rules of the commission, a permittee shall do the following: ...(2) Conduct the surface coal mining operation in a manner that maximizes the use and conservation of the solid fuel resource that is recovered so that reaffecting the land in the future through surface coal mining is minimized.")

Coal is Indiana's major energy source with 95 percent of electric generation fueled by coal. Indiana coal mining provides not only many high paying jobs directly but many ancillary jobs. A typical coal mine will contribute several 100 million dollars to the local economy over the life of the mine and double that on a statewide basis. The cost of electricity is a major cost for industry and can affect the location of new industries in Indiana. Approximately 50 percent of Indiana's electricity is consumed by industry. Even more fundamentally, keeping the cost of electricity low raises the standard of living for all Indiana citizens and especially those on fixed incomes. The social benefit of low cost energy is immeasurable. Further, coal is a vital national resource and is important to the security of the nation. Coal constitutes 95 percent of America's fossil energy reserve. Coal consumption in the U.S. is increasing.

#### Rule 8 – Noncontact Cooling Water Discharges.

• Activities do not result in significant lowering: Discharges consist of once-through noncontact cooling water that has not come into contact with any manufacturing material or wastewater. Noncontact cooling water is a clean discharge that will not cause a

significant lowering of water quality for any parameter. In fact, IDEM has expressly recognized the non-significant nature of noncontact cooling water discharges by providing that such discharges generally should not be subject to the reasonable potential procedures or water quality-based effluent limitations. *See* 327 IAC 5-2-11.5(g) (provides that the commissioner shall not impose WQBELs for a discharge consisting solely of once-through noncontact cooling water except in specific cases).

Rule 8 provides sufficient controls to assure that discharges subject to the general permit will not cause a significant lowering of water quality. The general conditions provide that oil & grease must not be detectable; that heat from the discharge shall comply with the temperature water quality criteria; and that the discharge must meet conditions of being free of floating and settleable solids and not causing excessive foam. The general permit also contains specific monitoring requirements for oil & grease, temperature, and pH. See 327 IAC 15-8-7.

- <u>Technical necessity</u>: The general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.
- <u>Important economic/social development</u>: Industries use noncontact cooling water to ensure efficient operations. Industrial activity supports development in the form of jobs, taxes, and influx of money to the local economy. Such development furthers economic and social progress in communities.

## Rule 9 – Petroleum Products Terminals

- Activities do not result in significant lowering: Potential discharges from these operations include storm water, water from hydrostatic testing of storage tanks, and tank bottom water. Storm water discharges only occur during wet weather events, when the receiving water is at high flow conditions (as opposed to critical low flow conditions). Therefore, any potential lowering of water quality would be short term and temporary. Hydrostatic test and bottom tank water discharges only occur once in a particular location, and generally last for less than a day. Therefore, any potential lowering of water quality would be short term and temporary. Furthermore, the water used to test lines is from a clean source, and the lines do not contain any significant source of contamination, providing further support that discharges do not cause a significant lowering of water quality.
- <u>Technical necessity</u>: The general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.
- <u>Important economic/social development</u>: Petroleum products terminals are necessary to deliver fuel to local areas, to power vehicles and other equipment.

## Rule 10 – Ground Water Petroleum Remediation Systems

- Activities do not result in significant lowering: This general permit covers discharges of treated groundwater from petroleum remediation systems. Recovery wells operate intermittently depending on the inflow of water due to wet weather. They cycle on and off depending on the sump levels. The flow rates are monitored and reported, and sampling for various parameters is required to ensure compliance. There are narrative descriptions for controls, equipment calibrations and inspections of the pumps and wells and reporting requirements. There are controls in place due to the very nature of the general permit requirements. The use of sumps, separators and level indicators keep the flows intermittent and minimum. Impacts are reduced because the contaminants are removed and/or treated prior to discharge back to the ground or permitted point source discharge. As the life of the wells and duration of the remediation continues, the contamination becomes less and less. No new or increased contamination should be occurring since the sole purpose of the remediation is contamination removal.
- <u>Technical necessity</u>: The specific operations of ground water petroleum remediation systems are overseen by IDEM. Further, the general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.
- <u>Important economic/social development</u>: Remediation projects ensure that public health and the environment is not threatened, and clean up ground water for future safe use.

#### Rule 11 – Hydrostatic Testing of Commercial Pipelines

- Activities do not result in significant lowering: Discharges covered by this general permit occur in one of the following situations: testing of new lines, or testing of existing lines to confirm integrity or following repairs. Such discharges only occur once in a particular location, and generally last for less than a day. Therefore, any potential lowering of water quality would be short term and temporary. Furthermore, the water used to test lines is from a clean source, and the lines do not contain any significant source of contamination, providing further support that discharges do not cause a significant lowering of water quality.
- <u>Technical necessity</u>: The general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.
- <u>Important economic/social development</u>: Hydrostatic testing is necessary to ensure the proper performance of pipelines, so that leaks and other safety concerns are remedied before the pipeline is uses to convey natural gas, oil, or other materials.

#### Rule 12 – Sand, Gravel, Dimension Stone, or Crushed Stone Operations

• <u>Activities do not result in significant lowering</u>: Entities eligible for coverage under this general permit use retention basins and sediment ponds to hold storm water and pit

dewatering water associated with operations. Discharges from the retention basins and sediment ponds to waters of the state occur infrequently. Therefore, any potential lowering of water quality would be short term and temporary.

- <u>Technical necessity</u>: The general permit imposes monitoring requirements and numeric effluent limitations designed to protect water quality.
- <u>Important economic/social development</u>: These operations support development in the form of jobs, taxes, and influx of money to the local economy. Such development furthers economic and social progress in communities.

## Proposed Rule Language

We believe that either approach – a finding that activities would not cause significant lowering, or a determination that activities are necessary to support important social or economic development – is justifiable for each general permit, as provided above. Therefore, the enclosed redline markup of the draft rule provides alternative rule language options to address each approach. The rule could use one approach for all general permits, or could use both approached and divide the general permits between them.

The proposed rule language for the insignificant lowering approach would be inserted into draft rule section 6 – activities that will not constitute a significant lowering of water quality – and provide as follows:

Activities seeking coverage under the general permits in 327 IAC 15 are not considered to cause a significant lowering of water quality.

The proposed rule language for the upfront antidegradation demonstration approach would be placed in draft rule section 7 – antidegradation demonstration and determinations – and state the following:

The department has determined that activities authorized by general permits under 327 IAC 15 are necessary to accommodate important economic and/or social development in the area in which the discharge is located. A person or entity submitting a notice of intent to comply with a general permit does not need to submit an antidegradation demonstration.

Documentation supporting either approach should be included in the fact sheet for the antidegradation rulemaking. The information would become the record to support U.S. EPA's determination to approve Indiana's decision concerning antidegradation review of activities authorized by general permits.

## 327 IAC 2-1.3-6, Activities that will not constitute a significant lowering of water quality

This draft rule section provides categories of activities for which it has been determined will not result in a significant lowering of water quality. New or increased discharges associated with such activities are not required to undergo the antidegradation demonstration process. There are separate lists provided based on whether the parameter under consideration is a BCC or non-BCC, and whether the proposed discharge is to a high quality water, OSRW, or ONRW. We appreciate IDEM's effort to provide these categories of activities. However, we believe several revisions and additions are warranted.

Dischargers that qualify for one of the activities in this section should not be required to submit information prior to submitting an application for a new, renewed or modified permit.

Subsection (a) provides that a discharger proposing a new or increased discharge that qualifies for one of the activities that do not constitute significant lowering of water quality shall submit information to IDEM <u>before</u> applying for a construction permit (if required) or a new, renewed or modified NPDES permit. This procedure creates an unnecessary and unjustified delay. The rule should provide that a discharger shall submit information necessary to show that it qualifies for one of the activities when it applies for a new, renewed or modified NPDES permit. Any required public notice procedures concerning antidegradation can be undertaken concurrently with the public notice procedures for the draft permit.

# Application of the activities should be the same for OSRWs as it is for high quality waters.

Draft rule provision 327 IAC 2-1.3-6(b) provides different application of the activities depending on whether the proposed discharge is to a high quality water or OSRW. As discussed previously, SEA 431 mandates that the antidegradation implementation procedures for OSRWs should the same as those for high quality waters, with the added overall improvement requirement. Therefore, all activities should apply to both types of waters.

## Addition of activities concerning BCCs, 327 IAC 2-1.3-6(c)

The following activities should be added to the list of activities concerning BCCs. The federal Great Lakes system regulations clearly cover these activities. The existing state rules for the Great Lakes system also include these activities.

- New or increased discharges of a BCC that will result only in a short term, temporary lowering of water quality. *See* 40 CFR Part 132, Appendix E, Section II, Paragraph F.1. and 327 IAC 5-2-11.3(b)(1)(C)(iii)(AA); 327 IAC 5-2-11.7(c)(1)(A).
- New limits for a non-BCC for an existing permitted discharger that will not allow an increase in either the existing mass or concentration of the non-BCC discharged, including new limits that are a result of new or improved monitoring data or analytical methods, or new or modified water quality criteria or values or effluent limitations guidelines, pretreatment

standards, or control requirements for POTWs. *See* 40 CFR Part 132, Appendix E, Section II, first Paragraph C.; 327 IAC 5-2-11.3(b)(1)(C)(ii); 327 IAC 5-2-11.7(b)(2).

# Addition of non-prohibited bypasses to activities concerning non-BCCs, 327 IAC 2-1.3-6(d)

The provision for bypasses not prohibited by 327 IAC 5-2-8(11) should be added to the list of activities concerning non-BCCs. The federal Great Lakes system regulations and the existing state rules for the Great Lakes system clearly allow this provision. *See* 40 CFR Part 132, Appendix E, Section II, Paragraph F.2. and 327 IAC 5-2-11.3(b)(1)(C)(iii)(BB); 327 IAC 5-2-11.7(b)(3).

The provision concerning control of nuisance species should be expanded so that it applies to the proper use of all water treatment additives, as provided in 327 IAC 5-2-11.7.

Draft rule provision 327 IAC 2-1.3-6(d)(6) concerning discharges of a substance used to control zebra mussels or other nuisance species in intake pipes or structures is too limited. The provision should be expanded to apply to proper use of all water treatment additives (WTAs). Used appropriately, WTAs serve beneficial functions. In fact, in many cases, WTAs reduce the toxicity of wastewater discharges. For example, corrosion inhibitors lower the level of copper in efffuents by slowing the rate of leaching from condensers, pipes, and other equipment.

It is important that IDEM continue to support the exception for WTAs that was adopted by the Water Pollution Control Board when it amended 327 IAC 5-2-11.7, Great Lakes system dischargers interim antidegradation implementation procedures for outstanding state resource waters, in 2000. That amended rule provides an exception for WTAs subject to certain conditions. *See* 327 IAC 5-2-11.7(c)(1)(D). Those conditions allow the immediate use of WTAs, other than bioaccumulative chemicals of concern, that have not been previously approved by IDEM:

- (1) If the WTA is not a biocide, the use of the WTA is necessary comply with permit conditions.
- (2) If the WTA is a biocide, the use of the WTA is necessary to prevent the loss of human life, personal injury, or severe property damage.
- (3) The permittee shall orally report information of the use of the WTA to IDEM within 24 hours of the time the permittee uses or begins to use the WTA.
- (4) The permittee shall provide written notice to IDEM within 5 days of the time the permittee uses or begins to use the WTA.

See 327 IAC 5-2-11.7(f).

The provisions concerning cleanup actions need to be modified so that they will not prevent or discourage environmentally beneficial activities.

The list of activities for both BCCs and non-BCCs both contain a provision concerning cleanup actions. See draft rule 327 IAC 2-1.3-6(c)(4) and (d)(7). Based on recent experience, this provision needs to be modified to make sure that it can be practically applied. provision requires that the action be undertaken to alleviate an environmental release that "may pose an imminent and substantial endangerment to public health or welfare." "endangerment" test comes from federal statutes, and has historically been interpreted broadly, so that it is not very difficult to trigger. However, that is not the way that IDEM has interpreted the test in applying its current antidegradation rules for the Great Lakes system. One case involved a major project for dredging of contaminated sediment from an Indiana river, which is to be done under the authority of CERCLA and RCRA. Also, this waterbody is at the top of IDEM's §303(d) list of impaired waters, and is one of the top priorities for conducting a TMDL to restore that water to attainment of water quality standards. Nevertheless, IDEM has taken the position that the "endangerment" test was not met, and that the project therefore had to go through antidegradation review. Simply put, that makes no sense. If that project did not meet the "endangerment" test, then we find it hard to conceive of any cleanup activity that would meet the test. In that case, the "response action" exemption from antidegradation review would be meaningless.

To avoid that illogical and environmentally counterproductive result, the "response action" exemption should be modified to remove the requirement that the response action must meet the "endangerment" test. As long as the activity is conducted under CERCLA, RCRA, or similar Federal or State authorities, there is adequate assurance that the cleanup is necessary and will improve the environment. In that case, there is no reason that antidegradation review is needed. In fact, having to go through that review would only discourage parties from taking responsible cleanup actions, which would result in more impact to the environment, rather than less. To encourage those cleanup activities, the exemption should be clarified to ensure that antidegradation review is not required.

Research and development projects should be included as an activity that does not require an antidegradation demonstration.

There are several other activities that we believe should be added to the rules. One would cover research and development projects. These projects are generally short-term and temporary in nature, and produce socially important results. Further, IDEM has provided exemptions for these activities in other portions of its rules.

"Brownfields" and other redevelopment projects should be included as an activity that does not require an antidegradation demonstration.

Another activity that should be included would cover "brownfields" projects. An important policy of this State is to encourage redevelopment of former industrial sites in urban areas. If a company seeks to build a new facility in one of those areas, bringing new jobs into

areas where those jobs are badly needed, State policies should encourage those activities. But if a developer has to go through the lengthy and resource-intensive antidegradation review process before beginning a redevelopment project, it might very well go elsewhere, especially since it might find out at the end of the process that its project did not meet the vague "important social and economic development" test, so that the project would not "pass" antidegradation review and could not happen at all. To avoid that result, there needs to be a "brownfields" exemption in the antidegradation rules, so that companies are encouraged to pursue redevelopment of sites in urban areas, including areas that have been designated as "empowerment zones."

Discharges that have been granted variances should not also be required to submit an antidegradation demonstration because the application and review process for obtaining a variance is substantially the same as the antidegradation demonstration and review process.

The draft rule should include a provision providing that antidegradation review is not required for agency-approved variances, including variances granted pursuant to the streamlined mercury variance rule recently adopted by the Water Pollution Control Board. All variance applications must review both the types of technology capable of treating the pollutant of concern and the social and economic costs of installing and operating each type of technology. This review is very similar to the technology review and demonstration of social or economic importance that is required for antidegradation review. In fact, U.S. EPA recommends that States use the same process for reviewing social and economic impacts for variances and antidegradation review. See Interim Economic Guidance for Water Quality Standards Workbook, EPA 823/B-95-002 (March 1, 1995). Thus, if IDEM has granted a variance to a discharger, it makes sense that the discharger should not also need to complete an antidegradation demonstration.

# 327 IAC 2-1.3-7, Antidegradation demonstration and determination

#### Demonstration of Technical Necessity of Lowering Water Quality

U.S. EPA and IDEM have interpreted the antidegradation demonstration to require two demonstrations: one concerning technical necessity and the other about economic or social importance. The technical necessity component concerns review of whether the proposed discharge will be minimized to the extent that is technical practicable, considering cost-effective, reasonably available control measures. Under this test, a new or increased discharge will be approved during antidegradation review to the extent that the discharge cannot be prevented or reduced by those measures.

The draft rule language in 327 IAC 2-1.3-7(b)(3) should be revised so that the technical necessity component of antidegradation review focuses on whether cost-effective, reasonably available technologies can reduce or eliminate a proposed significant lowering of water quality. Further, if a discharger will meet federal technology-based standards, it should not have to make another demonstration regarding technical necessity in antidegradation review. Where federal technology-based standards have not been developed, the assessment of technical necessity should focus on national capabilities of a particular industry. This process provides a precise set

of protocols that both dischargers and the public could use to monitor the work of IDEM. It provides IDEM a defensible reason to choose an option and a framework to make predictable, consistent decisions.

Cost must be taken into consideration during the technical necessity portion of antidegradation review. It has been suggested by certain members of the environmental community that the technical necessity component of antidegradation review should not take cost into consideration, and should instead be a test of whether any technology, regardless of its expense or availability, is available as an alternative to lowering the quality of a high quality waterbody. This position is not supported by federal regulation and guidance on antidegradation review, and is not an appropriate policy for the State of Indiana to adopt. The Great Lakes Water Quality Guidance, U.S. EPA's most complete explanation of antidegradation review, states that the technical component of an antidegradation demonstration should include the following analyses:

A. Pollution Prevention Alternatives Analysis. Identify any *cost-effective* pollution prevention alternatives and techniques that are available to the entity, that would eliminate or significantly reduce the extent to which the increased loading results in a lowering of water quality.

B. Alternative or Enhanced Treatment Analysis. Identify alternative or enhanced treatment techniques that are available to the entity that would eliminate the lowering of water quality and their *costs* relative to the cost of treatment necessary to achieve applicable effluent limitations.

40 CFR Part 132, Appendix E, III – Antidegradation Demonstration (emphasis added). It is clear from this regulatory language that U.S. EPA intends the technical necessity demonstration to take costs into consideration. This regulation is supported by information provided in the Supplementary Information Document ("SID"):<sup>3</sup>

To assess the need for a significant lowering of water quality, a person proposing an action that would lower water quality would first determine whether or not existing treatment, pollution prevention, additional treatment or some combination *within a defined cost range* could avoid the need to lower water quality.

SID, Section VIII.A.2.c., Antidegradation Demonstration. [Emphasis added.] U.S. EPA's regulations and guidance on the technical necessity demonstration clearly take cost into consideration. There is absolutely no reason for Indiana to make its demonstration requirements more stringent. In fact, cost considerations must play a role in the technical necessity

<sup>&</sup>lt;sup>3</sup>"Water Quality Guidance for the Great Lakes System: Supplementary Information Document (SID)," EPA-820-B-95-001, March 1995.

demonstration; otherwise, most dischargers would ever get beyond this part of the demonstration, and antidegradation review would act as a complete bar to new or increased discharges.

If a discharger is meeting federal technology-based standards, it should not have to make another demonstration regarding technical necessity in antidegradation review. Technology review could become extremely cumbersome and time-consuming, slowing down the process for making changes in facility operations. Also, if not done properly, the technology review could contradict control decisions that have already been made by U.S. EPA. For many industries, U.S. EPA has issued effluent limitations guidelines, which specify technology standards for the industry (e.g., best available technology, best practicable technology, best conventional technology, new source performance standards). Industrial dischargers have spent millions of dollars to install technology controls. These dischargers should not be forced to possibly spend even more to remove those controls and install other equipment based on an antidegradation review. Instead, if a discharger has installed federally-required technology controls, it should be presumed that those controls meet the antidegradation technical necessity test and nothing more should be required. This presumption would make the antidegradation review process significantly quicker and more efficient for all concerned, and would ensure that soundly based technology decisions made by U.S. EPA are given full credit.

Where federal technology-based standards have not been developed, the assessment of technical necessity should focus on national capabilities of a particular industry. When U.S. EPA has not established technology requirements for a particular industry or operation, IDEM should adhere strictly to the spirit of the U.S. EPA process in undertaking a technical necessity review. Federal rules establish how case-by-case effluent limitations are set. These rules consider the age of the equipment and facilities involved, the processes employed, the engineering aspects of the application of various types and control techniques, process changes, the cost of achieving such effluent reduction, and non-water quality environmental impact (including energy requirements). The assessment should compare nationwide capabilities in a particular industry, not only a particular Indiana facility capability. An Indiana facility would be justified in reducing a proposed discharge if, and only if, it would have been required for the entire industry in accordance with U.S. EPA protocols. In following such a policy, the economic analysis follows the standard procedure that U.S. EPA would use to tighten controls in a manner fair across the same industry.

### Demonstration of Important Economic or Social Development

In a memorandum dated March 14, 2001, IDEM took the position that it alone must make the affirmative determination about what activities are economically or socially important. However, the antidegradation policy requires the <u>State</u> to make a determination about important economic or social development. Neither the federal nor the State rule specify that any one agency, such as IDEM, is solely responsible for the decision. In fact, IDEM has admitted that making decisions about what types of activities are economically or socially important is outside of its functions, proficiencies and area of expertise. Other agents of the State, whether other State agencies or local government, already have the authority and duty to make judgments about

the economic or social worth of a project or activity. For example, the Indiana Utility Regulatory Commission ("IURC") is responsible for ruling on the necessity of public utilities. Similarly, decisions about new development are addressed by local governments through the planning and zoning process. Thus, the demonstration process should rely on these State agents to act within their existing authority to review economic or social importance. This approach will assure that the decision maker is appropriate to carry out the task. It will also avoid the redundancy of having multiple governmental entities making similar or identical decisions, and eliminate the possibility of inconsistent findings. Of course, under this approach, IDEM would still be making the other determination under antidegradation review: that the new or increased discharge is necessary from a technical standpoint.

We recommend that the following process be used to conduct important economic or social development reviews.

#### New Business and Development

New business and development activities typically require review and approval by one or more agents of the State. If an agent of the State approves a new business or development, this decision is presumed to meet the economic or social importance test for antidegradation purposes, and separate review by IDEM is not necessary. The following are examples of appropriate agents of the State:

- The IURC judges the necessity of public utilities by reviewing current and anticipated future needs for service in the area in which the utility intends to locate and by reviewing the utility's proposed rate structure. If the IURC determines that a public utility is needed in an area, it issues a certificate of public convenience and necessity. For example, power utilities may only be sited upon a finding that "public convenience and necessity require or will require the construction, purchase, or lease of the facility." IC 8-1-8.5-5(b)(3). Thus, if the IURC issues a certificate of public convenience and necessity to a power company, its judgment meets the requirement under antidegradation concerning demonstration of important economic or social development. We recommend this approach for all public utilities regulated by the IURC.
- The Indiana Department of Commerce ("IDOC") issues grants and loans to support new and expanding businesses in Indiana. For example, the Industrial Development Grant Funds awards money to local governments to build infrastructure needed for a new or expanded business. IDOC requires that the project be related to economic development and have the potential to create new jobs. Projects that are eligible for grant funds include water and sewer lines, wastewater treatment facilities, drainage facilities, road improvements, rail spurs and fiber optic cable. Several of the eligible projects sewer lines, wastewater treatment and drainage facilities, road improvements could result in a new or increased discharge of wastewater subject to antidegradation review. If IDOC has determined that such infrastructure is necessary to economic development in the area, it should automatically be assumed that the project has demonstrated its economic importance under antidegradation. Likewise, it is possible that the infrastructure project is needed to support a business that will

have a new or increased discharge of wastewater. Once again, IDOC's decision to award grant funds to the infrastructure project should satisfy any antidegradation requirements concerning economic or social importance to the business expansion project.

- Indiana's home rule statute vests local units of government including counties, cities, towns and townships the powers they need to effectively operate local affairs. IC 36-1-3. In particular, IC 36-1-3-3(b) provides that "[a]ny doubt as to the existence of a power of a unit should be resolved in favor of its existence." In addition, IC 36-1-3-4 in part states:
  - (b) A unit has:
  - (1) All powers granted it by statute; and
  - (2) All other powers necessary or desirable in the conduct of its affairs, even though not granted by statute.

Land use planning and development is a primary duty of local government. IC 36-7-2-2 describes the general power of a local unit of government to "plan for and regulate the use, improvement, and maintenance of real property and the location, condition, and maintenance of structures and other improvements." Furthermore, IC 36-7-4-201, in defining the purpose of local planning and zoning, provides as follows:

- (b) The purpose of this chapter is to encourage units to improve the health, safety, convenience, and welfare of their citizens and to plan for the future development of their communities to that end:
- (1) That highway systems be carefully planned;
- (2) That new communities grow only with adequate public way, utility, health, educational, and recreational facilities;
- (3) That the needs of agriculture, industry, and business be recognized in future growth;
- (4) That residential areas provide healthful surroundings for family life; and
- (5) That the growth of the community is commensurate with and promotive of the efficient and economical use of public funds.

Through the planning and zoning process, local governments are charged with the responsibility to make decisions about what activities are important for their areas, whether in terms of economic growth, public health and safety or social improvement.

In this regard, local governments have the authority to act on behalf of the State in the local planning process of determining economic or social importance. Other actions by local entities can have the same meaning. These decisions include providing tax abatements, roads

and utilities at tax payer expense, and other initiatives demonstrating the value the local entity finds in having the action take place. Therefore, IDEM does not need to have a redundant oversight approval process for antidegradation review. This should be the case whether the new business or development needs to get an area rezoned, needs a variance from a zoning classification, or otherwise seeks support from the local government. It also is appropriate if the area is already properly zoned, because the local government has previously made the decision that business or development of a certain type is economically or socially important for the community. Furthermore, to the extent a process is considered that requires local government review outside of the traditional planning and zoning process, antidegradation review should not become a second attempt for opponents to fight a project that has already received local approval.

Undoubtedly, there are other existing state agencies and local governments that could have an important role to play in review of economic or social importance. For example, the Indiana Development Finance Authority provides several grants and loans to Indiana businesses. Also, activities requiring antidegradation review that will be located in areas participating in the Indiana Enterprise Zone Program, which is designed to improve the quality of life in designated enterprise zones through community and business redevelopment initiatives, should automatically qualify as important. If the general approach allowing appropriate agents of the State to make economic or social importance determinations is adopted, other existing authorities would need to be identified and evaluated for their appropriateness.

It may be the case that some new businesses or developments will not be required to undergo a preexisting state or local approval process. This could be the case for activities or projects that do not require oversight by a state agency, and which will be located in one of the Indiana counties that have not adopted local planning and zoning control. In these situations, several options should be available. First, new businesses or developments could request that the local government adopt a resolution or issue a letter of support for the activity or project. If the local government does so, this action would create a presumption of the economic or social importance of an activity or project. If the local government does not act, the new business or development would submit information to IDEM or another agent of the State to allow it to make an economic or social importance decision. Likewise, at its option, the new business or development could go straight to IDEM or another agent of the State to seek a determination that an activity or project is economically or socially important.

#### Existing Business and Development

There are two scenarios that could arise for existing business and development activities. First, a business or development simply could be increasing its capacity, but not otherwise making new products or adding new processes. For example, a manufacturer that currently produces one million units of its product a year could decide to boost production to two million units a year. In this case, economic or social importance review should not be necessary because it is presumed that the existing business or development is important to the area, and that action of increasing capacity enhances the importance of the business or development. In other words,

if the business or development was originally judged to be economically or socially important, doing more of the same does not require additional review.

The second scenario that could arise involves an existing business or development wanting to add a new product or process that changes the nature of the business or development, and consequently, the nature of the discharge from the facility. As a general rule, these types of changes may not require any review by a state agency or a local zoning determination. Therefore, the same set of options be used as those stated above for new business or development without preexisting state or local review. The existing business or development could seek a local resolution or letter of support or request review by IDEM or another agent of the State if local government does not act or in lieu of local government action.

To implement these procedures, the following language should be added to subsection 7(f):

If the unit of government in which the proposed new or increased discharge would occur:

- (A) issues any necessary permits, approvals, or zoning decisions concerning the proposed activity; or
- (B) determines by resolution that the proposed activity will support important economic or social development in the area; or
- (C) does not object to or otherwise oppose the activity;

the commissioner shall determine that the activity does support important economic or social development in the area.

#### Consideration of Benefits of New or Increased Discharge

In connection with the social and economic development analysis, IDEM should be required to consider the environmental benefits of the affected discharge. For example, cooling water is valuable for low-flow augmentation and, for that reason, may be environmentally preferable to any nondischarge alternative. Arguably, those types of benefits militate against any finding of degradation or, alternatively, support the important economic and social development prong of antidegradation review.

# The notice requirements in subsection 7(b)(4) should be deleted.

Subsection 7(b)(4) states that applicants preparing antidegradation demonstrations must make a good faith effort to notify all government or privately sponsored conservation projects that have specifically targeted improved water quality or enhanced recreational opportunities on the waterbody in that area of the proposed new or increased discharger. This notification would be required before the demonstration is submitted to IDEM for review. This provision should be deleted, because it is unnecessarily duplicative of the public notice requirements that IDEM must fulfill in accordance with section 10 of the draft rule.

There is no regulatory basis for requiring evaluation or consideration of negative impacts, as specified in subsection 7(c).

The draft rule states that the antidegradation demonstration must contain an analysis of the positive and negative social or economic development impacts to the area. This requirement bears no relation to the antidegradation standard, which requires IDEM to consider whether the proposed lowering of water quality is necessary to accommodate important social or economic development in the area. This standard is focused solely on the positive social or economic impacts of a proposed activity. It does not require an extensive cost-benefit analysis, or even a general weighing of costs versus benefits. Therefore, requirements concerning negative impacts or costs should not be required, and should be deleted from the rule.

We also recommend that two additional factors be added to this provision: production level increases and efficiency increases. The Michigan antidegradation rule includes these additional factors as relevant to the assessment of important social or economic development in the area.

The extensive list of factors in subsection 7(f)(1) that IDEM must consider in making a determination on an antidegradation demonstration should be deleted, and replaced with a simple requirement to consider information submitted by the applicant as required by the rule, along with other information deemed relevant by IDEM.

The list of 13 factors that must be considered by IDEM when reviewing an antidegradation demonstration is overly prescriptive, and bears no relation to the antidegradation standard. The antidegradation standard requires IDEM to consider whether the proposed lowering of water quality is necessary to accommodate important social or economic development in the area. It does not require an extensive balancing of costs and benefits, as would be indicated by the list of factors. By including this list of factors, IDEM is effectively raising the bar set by the federal regulations for making a successful antidegradation demonstration. This is not warranted, and may also not be done unless IDEM specifically addresses why it has determined to propose state procedures that are more stringent than federal regulations.

The list of factors provided in subsection 7(f)(1) should be replaced with the following provisions:

The commissioner shall consider the following:

- (A) Information submitted by the applicant pursuant to subsections b, c, and d, as appropriate;
- (B) Information submitted during the public comment period, and if held, the public meeting; and
- (C) Any other information regarding the proposed activity and affected waterbody that the commissioner deems appropriate. Any such information must be clearly identified in the documentation

concerning the commissioner's determination on the antidegradation demonstration.

Consideration of impacts to endangered or threatened species should be limited to species listed pursuant to the federal Endangered Species Act.

Subsection 7(f)(2)(C) provides that the commissioner shall deny some or all of the request to lower water quality if the action would jeopardize state listed endangered or federally listed threatened or endangered species. As explained previously in these comments, antidegradation rules should not contain special provisions for threatened or endangered species, because they are already fully protected by the water quality criteria. Therefore, this provision should be deleted.

The provisions concerning approval of antidegradation demonstrations in subsection 7(f)(3) are inconsistent with the requirements of the antidegradation standard.

Subsection 7(f)(3) provides a standard of review that is different from that provided in the antidegradation standards, and is also inconsistent with the provisions in subsection 7(f)(3). The language of this provision should be revised as follows:

The commissioner shall approve the request to lower water quality if:

- (A) cost-effective measures necessary to prevent or minimize the proposed lowering are not reasonably available; and
- (B) the action that would cause the lowering is necessary to accommodate important economic or social development in the area in which the waterbody is located.

### 327 IAC 2-1.3-8, Designation of a waterbody as an outstanding state resource water

The draft rule language is inconsistent with the designation requirements specified in SEA 431.

In 1999, IDEM published a second notice draft triennial review rule that included detailed designation procedures for OSRWs and ONRWs. In comments submitted on that draft rule, the IWQC and IMA raised substantial concerns with many aspects of these proposed procedures. IDEM did not move that comprehensive rulemaking effort to the next step, and instead decided to initial several new rulemaking efforts, each with a more focused subject matter. This draft rule represents the rulemaking effort specific to antidegradation and special designations of waterbodies. This section on OSRW designations appears to recycle most of the 1999 draft rule procedures, and merges these procedures with the SEA 431 provisions concerning OSRW designations. However, in doing so, IDEM has made the draft rule language inconsistent with the designation requirements specified in SEA 431, and has also failed to remedy any of the problems with the 1999 draft rule procedures.

SEA 431 provides clear direction concerning designations of OSRWs. The Water Pollution Control Board must make a determination that the waterbody has some unique or special ecological, recreational or aesthetic significance. IC 13-18-3-2(g). The Board also may not adopt a rule designating a waterbody as an OSRW until it has considered the following factors:

- Economic impact analyses taking into account future population and economic growth, presented by any interested party.
- Biological criteria scores, considering fish communities, macroinvertibrate communities, and chemical quality criteria using representative biological data from the waterbody under consideration.
- The current level of urban and agricultural development in the watershed.
- Whether the designation will have a significant adverse effect on future population, development and economic growth in the watershed, if the waterbody is in a watershed with more than three percent urban land use or serves a municipality with a population of greater than 5,000.
- Whether the designation is necessary to protect the unique or special ecological, recreational or aesthetic significance of the waterbody.

IC 13-18-3-2(h). All of these considerations and findings must be summarized, made available to the public and presented to the Environmental Quality Service Council. IC 13-18-3-2(j). Further, for any newly designated OSRWs, the Board must have already adopted antidegradation implementation procedures consistent with other provisions of SEA 431, which are discussed below. IC 13-18-3-2(n). These new requirements reflect the General Assembly's intent to make the OSRW designation process thorough and to ensure that only those waters truly deserving of special protection receive this designation. As can be seen from the types of information that the Board must consider before designating an OSRW, factors such as economic development, social growth and existing land uses are key considerations.

The merger of the SEA 431 requirements with the 1999 draft rule procedures results in provisions that are inconsistent with the statutory provisions. For example, subsection 8(c)(4)(B) provides that a first or second order stream in an undeveloped watershed can qualify as having "unique or special recreational or aesthetic significance." This provision is problematic for several reasons. Subsection 8(d)(7) provides a definition of "undeveloped watershed" that would clearly allow a watershed dominated by agricultural uses to qualify as "undeveloped." This outcome clearly conflicts with the SEA 431 provisions, which require consideration of the level of current agricultural development in the watershed. *See* IC 13-18-3-2(h)(3). Also, there is no basis for automatically assuming that first or second order streams in undeveloped watersheds are of such quality to elevate to the status of a criterion for "unique or special recreational or aesthetic significance.

We also have several specific concerns with the designation procedures taken from the 1999 rule, which are provided in the balance of our comments on this draft rule section. IDEM needs to complete reconsider the OSRW designation procedures, to ensure consistency with the SEA 431 provisions and to remedy the following problems.

To meet the "unique or special ecological significance" test, a waterbody should have excellent biological quality and either excellent chemical quality or excellent physical quality.

The draft rule provides that for a waterbody to be considered to be considered to have unique or special ecological significance, its quality must be excellent in any two of the following areas: biological quality, chemical quality, and physical quality. We have several concerns about this test. For example, we believe that to be designated as an OSRW, with the stringent implementation procedures that apply, a waterbody should have at least excellent biological quality, and either excellent chemical quality or excellent physical quality. Otherwise, a water that is not biologically healthy can become an OSRW, and that simply makes no sense.

The criteria for determining "unique recreation or aesthetic significance" are largely irrelevant to whether a waterbody needs additional protection beyond the water quality standards.

The draft rule provides that to be considered to have unique recreational or aesthetic significance, a waterbody must have at least two of the following characteristics: (1) excellent aesthetic quality; (2) be partially or completely contained in or bordering on a State, Federal or locally-designated park, forest, natural area, or nature preserve; (3) have endangered or threatened species contained within or dependent on the waterbody; and (4) be an outstanding recreational fishery or be a first or second order stream in an undeveloped watershed. There are a number of problems with this set of criteria, which are too vaguely defined and do not focus properly on the factors that should be most relevant to OSRW designation.

The result of designating a waterbody as an OSRW is that dischargers to that waterbody will be subject to very stringent limitations, especially on their ability to increase their discharges. Therefore, it makes sense to make OSRW decisions based on two primary factors: the need to protect the water quality of the waterbody (beyond the protections already applying through the water quality standards and the Tier 2 procedures), and the social/economic impacts that will result from imposing requirements beyond the standards and Tier 2 process. But most of the previous criteria that IDEM has proposed to date do not go to either of those two key factors. For example, whether the waterbody has an outstanding recreational fishery, or whether it happens to border on a locally-designated park, have nothing to do with whether the waterbody needs additional protection or whether OSRW classification would have serious social/economic impacts. Therefore, these criteria should not be considered.

The criteria for judging excellent biological quality needs to be made consistent and the agency should rely only on valid methods and data.

The criteria for determining excellent biological quality are inappropriate and internally inconsistent. To qualify based on fish data, the waterbody must have an Index for Biotic

Integrity score that is in the top 10 percent, but it can qualify based on a macroinvertebrate score that is only in the top 25 percent. The fact that a waterbody is merely in the top quarter of its class in biological health should not be enough to make it an OSRW. Instead, 10 percent should be the minimum score for any type of data, and a waterbody should have to be in the top 10 percent in fish health and in macroinvertebrate health.

IDEM also needs to make sure that its judgments on biological health are made based on technically valid methods and data. The draft rule references a series of studies performed by Tom Simon, now with the United States Fish and Wildlife Service. Those studies have been reviewed by experts in the field, who have concluded that the studies are technically invalid, have not been subjected to peer review, and cannot be used as the basis for stream use designations. (The reports prepared by those experts are enclosed with these comments and are incorporated by reference.) Reviews of field data and discussions with sampling crews have found numerous data errors in the reports, a lack of repeatable, peer-reviewed sampling methodologies, and inadequate, cursory field sampling techniques. As a result, the conclusions of these reports are highly suspect, and the raw data is not usable for biological assessment purposes. Therefore, IDEM cannot rely on those studies in making OSRW classification decisions based on biological quality.

The "excellent chemical quality" test for a special designation is too subjective and allows waters to meet the test even if they are not complying with water quality standards.

We also have concerns about the "excellent chemical quality" test in the draft rule. This provision is completely subjective and leaves the agency with the ability to make arbitrary judgments. As previously proposed, excellent chemical quality means only "a determination by a comprehensive assessment of the watershed" using "accepted and reliable analysis techniques and methods," which makes a comparison to "reference condition(s)" that are based on "similar studies that characterize the optimal condition for the region." Nowhere does that test actually require that the waterbody be in compliance with water quality standards. Therefore, it is possible under that test to have a waterbody qualify as having excellent water quality, even though it has levels of several pollutants that are significantly higher than allowed by standards. The test should be revised to require that to have "excellent chemical quality," a waterbody must be in compliance with most, if not all, applicable numeric water quality standards.

## 327 IAC 2-1.3-9, Designation of a waterbody as an outstanding national resource water

The draft rule provisions for designations of ONRWs restate the procedures from 1999 draft triennial review rule, and simply add a statutory citation to the SEA 431 requirements. The ONRW designation is meant to describe the benchmark of water quality that shall be maintained and protected, and is only intended for certain types of important waters:

- Waters protected through federal or state law, presidential or secretarial action, international treaty or interstate compact.
- Waters with exceptional recreational significance.

- Waters with exceptional ecological significance.
- Waters with other special environmental, recreational or ecological attributes.
- Waters for which designation is necessary to protect other ONRWs.

IC 13-18-3-2(d). These factors should be clearly restated in the rule language, so that the appropriately high bar for designating an ONRW is clearly understood.

### **Repealed Sections**

Section 8 of the draft rule language contains a list of the current rule sections to be repealed upon adoption of the rulemaking. This section includes the current Great Lakes system antidegradation standards and implementation procedures. It would also include 327 IAC 2-1-2, the antidegradation standards for waters outside of the Great Lakes system.

#### Conclusion

As can be seen from these comments, the Indiana Water Quality Coalition and the Indiana Manufacturers Association have many significant concerns with the draft antidegradation rule. We believe that these concerns must be addressed before the rulemaking moves forward, and that incorporation of our suggested changes will result in an antidegradation rule that is workable and appropriate to meet the federal requirements for antidegradation review.

If you have any questions about these comments, please feel free to give me a call at 312/214-8812.

Sincerely,

Kari

Kari Evans

#### Enclosures

cc: Members of Indiana Water Quality Coalition and Indiana Manufacturers Association